No. 7500095

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Florida Foundation Seed Producers, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF seventeen YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

CORN

'Florida 32'

In Testimony Whereof, *I have hereunto set my hand and caused the seal of the* Plant Variety Protection Office *to be affixed at the City of* Washington *this* 28th *day of* January *in the year of our Lord one thousand nine hundred and* seventy-seven

Attest:

Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Secretary of Agriculture

FORM GR-470
(2-12-71)

UNITED STATES DEPARTMENT OF AGRICULTURE
CONSUMER AND MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782

FORM APPROVED
OMB NO. 40-R3712

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: *See Reverse.*

1. VARIETY NAME OR TEMPORARY DESIGNATION	2. KIND NAME	FOR OFFICIAL USE ONLY
Florida 32	Sweet corn inbred	PVPO NUMBER 7500095
3. GENUS AND SPECIES NAME	4. FAMILY NAME *(Botanical)*	FILING DATE 5.22.75 / TIME 10 A.M.
Zea Mays	Gramineae	
	5. DATE OF DETERMINATION	FEE RECEIVED / CHARGES
	May 5, ~~1975~~ 1971 Rjs	$ 750.00 / —

6. NAME OF APPLICANT(S)	7. ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)*	8. TELEPHONE AREA CODE AND NUMBER
Florida Foundation Seed Producers, Inc.	P.O. Box 14006 University Station Gainesville, Florida 32604	904-392-1821

9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: *(Corporation, partnership, association, etc.)*	10. STATE OF INCORPORATION	11. DATE OF INCORPORATION
Corporation	Florida	1957

12. Name and mailing address of applicant representative(s), if any, to serve in this application and receive all papers:

A. J. Oswald, Secretary-Treasurer-Manager
Florida Foundation Seed Producers, Inc.
P.O. Box 14006, University Station
Gainesville, Florida 32604

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

☑ 12A. Exhibit A, Origin and Breeding History of the Variety *(See Section 52, P.L. 91-577)*

Rjs ☑ 12B. Exhibit B, Botanical Description of the Variety

☑ 12C. Exhibit C, Objective Description of the Variety - Will be filed at later date.

☑ 12D. Exhibit D, Data Indicative of Novelty

☑ 12E. Exhibit E, Statement of the Basis of Applicant's Ownership

V 12F. Proposed Release Circular enclosed

The applicant declares that a viable sample of basic seed of this variety will be deposited upon request before issuance of a certificate and will be replenished periodically in accordance with such regulations as may be applicable. *(See Section 52, P.L. 91-577).*

14A. Does the applicant(s) specify that seed of this variety be sold by variety name only as a class of certified seed? *(See Section 83(a), P.L. 91-577) (If "Yes," answer 14B and 14C below.)* ☐ YES ☑ NO

14B. Does the applicant(s) specify that this variety be limited as to number of generations? ☐ YES ☐ NO	14C. If "Yes," to 14B, how many generations of production beyond breeder seed?

Applicant is informed that false representation herein can jeopardize protection and result in penalties.

The undersigned applicant(s) of this sexually-reproduced novel plant variety believes that the variety is distinct, uniform, and stable as required in Section 41 and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act (P.L. 91-577).

May 9, 1975 (DATE) — S H West (SIGNATURE OF APPLICANT) — Univ. of Florida IFAS Representative

May 9, 1975 (DATE) — A. J. Oswald (SIGNATURE OF APPLICANT) — Manager-Florida Foundation Seed Prod.

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PV No. 7500095

EXHIBIT A

Origin and Breeding History of the Variety

Florida 32 was developed at the Agricultural Research and Education Center of the University of Florida, Belle Glade, Florida, by Professor Emil Wolf by crossing University of Illinois B_3S_2P39A sh_2 line with Iowa 2132 (su_1), backcrossing to the 2132 four times and then inbreeding and selecting for seven generations.

Application No.750095

Supplement to Exhibit A

Florida 32 sweet corn inbred

The Florida 32 sweet corn inbred is very stable genetically. No variants have been noted in the line since its first use in test crosses in 1967 and subsequent pilot and commercial production of Florida Sweet. Further evidence of its uniformity is the four (4) backcrosses followed by seven (7) generations of selfing.

EXHIBIT B

Florida 32 sweet corn inbred

Florida 32 sweet corn inbred seed contain the sh_2 gene in the starchy (su_1) background and is more shrunken and lighter in weight than normal sweet corn (su_1) seed. It also contains much less starch and higher sugar content in the endosperm.

Florida 32 plants look like any normal sweet corn plant (Zea mays Linn rugosa). They are dark green in color, about 5.5 feet tall, with one or two suckers about the same height as the main stalk. Tassels are yellow and silk color is green. It has some second ears with top ears about one foot above the ground. Ear shanks have about six (6) nodes and are about five (5) inches long. Ears are about eight (8) inches long with sixteen (16) rows of yellow kernels well filled to the tips. Husk extension is long.

FORM APPROVED. OMB NO. 40-R3712

FORM GR-470-28
(2-15-74)

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782

EXHIBIT C
(Corn)

OBJECTIVE DESCRIPTION OF VARIETY
CORN *(ZEA MAYS)*

NAME OF APPLICANT(S)
Florida Foundation Seed Producers, Inc.

ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)*
Florida Foundation Seed Producers, Inc.
P. O. Box 14006 U. Station
Gainesville, Florida 32604

FOR OFFICIAL USE ONLY
PVPO NUMBER
7500095

VARIETY NAME OR TEMPORARY DESIGNATION
Florida 32

Place the appropriate number that describes the varietal character of this variety in the boxes below.
Place a zero in first box (e.g. [0][8][9] or [0][9]) when number is either 99 or less or 9 or less.

1. TYPE:

[1] 1 = SWEET 2 = DENT 3 = FLINT 4 = FLOUR 5 = POP 6 = ORNAMENTAL

2. REGION WHERE BEST ADAPTED IN THE U.S.A.:

[7] 1 = NORTHWEST 2 = NORTHCENTRAL 3 = NORTHEAST 4 = SOUTHEAST
5 = SOUTHCENTRAL 6 = SOUTHWEST 7 = MOST REGIONS

3. MATURITY (In Region of Best Adaptability):

(Under "omments" (pg. 3) state how heat units were calculated)

[7][6] DAYS FROM EMERGENCE TO 50% OF PLANTS IN SILK [ ][ ][ ][ ] HEAT UNITS

[2][1] DAYS FROM 50% SILK TO OPTIMUM EDIBLE QUALITY [ ][ ][ ][ ] HEAT UNITS

[7][0] DAYS FROM 50% SILK TO HARVEST AT 25% KERNEL MOISTURE [ ][ ][ ][ ] HEAT UNITS

4. PLANT:

[1][4][0] CM. HEIGHT (To tassel tip) [ ][2][8] CM. EAR HEIGHT (To base of top ear)

[1][0] CM. LENGTH OF TOP EAR INTERNODE

Number of Tillers:

[2] 1 = NONE 2 = 1–2 3 = 2–3 4 = > 3

Number of Ears Per Stalk:

[2] 1 = SINGLE 2 = SLIGHT TWO-EAR TENDENCY
3 = STRONG TWO-EAR TENDENCY 4 = THREE-EAR TENDENCY

Cytoplasm Type:

[1] 1 = NORMAL 2 = "T" 3 = "S" 4 = "C" 5 = OTHER (Specify) _____

5. LEAF (Field Corn Inbred Examples Given):

Color:

[3] 1 = LIGHT GREEN (HY) 2 = MEDIUM GREEN (WF9) 3 = DARK GREEN (B14) 4 = VERY DARK GREEN (K166)

Angle from Stalk (Upper half):

[ ] 1 = < 30° 2 = 30–60° 3 = > 60°

Sheath Pubscence:

[1] 1 = LIGHT (W22) 2 = MEDIUM (WF9)
3 = HEAVY (OH26)

Marginal Waves:

[1] 1 = NONE (HY) 2 = FEW (WF9) 3 = MANY (OH7L)

Longitudinal Creases:

[1] 1 = ABSENT (OH51) 2 = FEW (OH56A)
3 = MANY (PA11)

Width:

[0][5] CM. WIDEST POINT OF EAR NODE LEAF

[0][8] NUMBER OF LEAVES PER MATURE PLANT

Length:

[ ][5][8] CM. EAR NODE LEAF

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EXHIBIT D

Data Indicative of Novelty

Plants and ears of Florida 32 closely resemble 2132 plants except that ear length and husk extension of Florida 32 are slightly shorter. Florida 32 plants normally shed pollen and silks emerge 3 to 4 days later than the Florida 56 seed parent of Florida Sweet hybrid sweetcorn.

Florida 32 plants are five to six feet tall under good conditions in the Idaho seed production area and average one and a half tillers per plant, two to six feet tall. The plants normally reach 50% pollen shed approximately 80 days from planting and 50% silk in 85 days. Pollen production is good. Ears are 5.5 inches to 6.0 inches long and well filled to the tasselate tips. The majority of the ears have 16 or more irregular rows of kernels.

Difficulty has been encountered in producing good stands of Florida 32 plants in Idaho, particularly early in the season when soil temperatures are cool. Seedlings are very susceptible to dampoff.

Supplement to Exhibit D

Florida 32 sweet corn inbred

Florida 32 most closely resembles Iowa 2132. The major difference between these two inbreds is that Florida 32 has the homozygous recessive sh_2 gene and Iowa 2132 has the homozygous recessive su_1 gene.

EXHIBIT E

Basis of Applicant's Ownership

Florida Foundation Seed Producers, Incorporated, is the official representative of the University of Florida Agricultural Experiment Stations through a Memorandum of Understanding for releasing and maintaining stocks of varieties developed by the University of Florida.

Professor Emil Wolf developed and tested this variety while a staff member of the University of Florida, Agricultural Research and Education Center, Belle Glade, Florida, and Florida Foundation Seed Producers, Incorporated, has sole rights for increase and distribution of seeds of this variety.

Use of this material for the production of Florida Sweet Hybrid sweetcorn or their incorporation into other hybrids can only be done with approval by Florida Foundation Seed Producers, Incorporated, P.O. Box 14006 U. Station, Gainesville, Florida, 32604 and the University of Florida, Institute of Food and Agricultural Sciences, 1022 McCarty Hall, Gainesville, Florida 32611.

FLORIDA FOUNDATION SEED PRODUCERS, INC.

CHARTERED BY THE STATE OF FLORIDA AS A NON-PROFIT CORPORATION TO INCREASE AND DISTRIBUTE [illegible]

P. O. BOX 14006 UNIVERSITY STATION
TELEPHONE 904-392-1821

May 16, 1975

MEMORANDUM

TO: Seed Growers

SUBJECT: Release of Florida 32 and Florida 56 sweetcorn inbreds

FROM: A. J. Oswald, Manager

A University of Florida committee of the Agricultural Experiment Stations has recommended the release of Florida 32 and Florida 56 sweetcorn inbreds with the following considerations:

1) Registration of the two lines will be made with the USDA, Plant Variety Protection Office by Florida Foundation Seed Producers, Incorporated.

2) Arrangements for use of these materials will [illegible] by seedsmen who are interested in producing hybrids from these breeding lines with the Florida Foundation Seed Producers, Inc. and the University of Florida.

The initial release of these two lines will be made to seedsmen interested in producing and marketing Florida Sweet hybrids or other hybrids that would result in an improved sweetcorn industry in Florida on a royalty agreement. The final terms of the royalty agreement have not been made, but will probably result in five to ten cents per pound return for marketed hybrids.

Since the seed quality of the Florida Sweet hybrid have generally been poor, we would like to encourage others to use this material in their breeding program for developing better quality varieties for the Florida growers.

Seed stocks will be made available to those interested upon signing the attached agreement and returning to Florida Foundation Seed Producers, Incorporated. The charge will be $5.00 per pound FOB shipping point.

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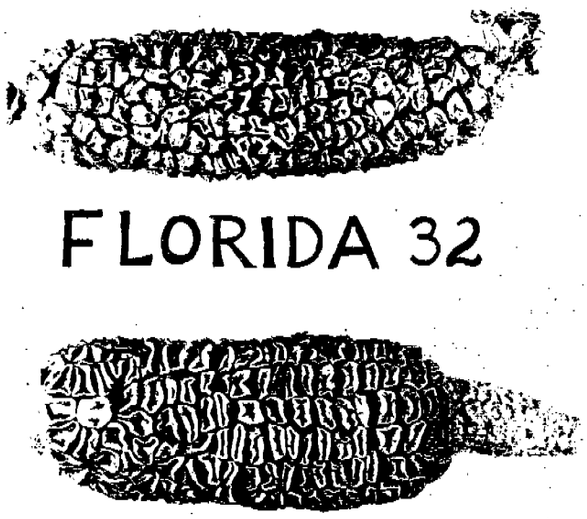

Figure 1 Typical dried Florida 32 and Florida 56 ears produced in Belle Glade, spring 1974. Note unfilled tip on Florida 56 and tasselate tip on Florida 32.

FORM APPROVED. OMB NO. 40-R3712

FORM GR-470-28
(2-15-74)

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
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HYATTSVILLE, MARYLAND 20782

EXHIBIT C
(Corn)

OBJECTIVE DESCRIPTION OF VARIETY
CORN *(ZEA MAYS)*

NAME OF APPLICANT(S)
Florida Foundation Seed Producers, Inc.

ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)*
Florida Foundation Seed Producers, Inc.
P. O. Box 14006 U. Station
Gainesville, Florida 32604

FOR OFFICIAL USE ONLY
PVPO NUMBER
7500095
VARIETY NAME OR TEMPORARY DESIGNATION
Florida 32

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2. REGION WHERE BEST ADAPTED IN THE U.S.A.:

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Longitudinal Creases:

[1] 1 = ABSENT (OH51) 2 = FEW (OH56A)
3 = MANY (PA11)

Width:

[0][5] CM. WIDEST POINT OF EAR NODE LEAF

Length:

[ ][5][8] CM. EAR NODE LEAF

[0][8] NUMBER OF LEAVES PER MATURE PLANT

00005

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6. TASSEL:

[1][0] NUMBER OF LATERAL BRANCHES

Branch Angle from Central Spike:

[2] 1 = < 30° 2 = 30–40° 3 = > 45°

Peduncle Length:

[0][7] CM. FROM TOP LEAF TO BASAL BRANCHES

Pollen Shed:

[2] 1 = LIGHT (WF9) 2 = MEDIUM 3 = HEAVY(KY21)

[1] **Anther Color:** } 1 = YELLOW 2 = PINK 3 = RED 4 = PURPLE 5 = GREEN

[1] **Glume Color:** } 6 = OTHER (Specify) _____

Pollen Restoration for Cytoplasms (0 = Not Tested, 1 = Partial, 2 = Good)

[0] "T" [0] "S" [0] "C" [ ] OTHER (Specify Cytoplasm and degrees of restoration) _____

7. EAR (Husked Ear Data Except When Stated Otherwise):

[2][0] CM LENGTH [4][0] MM. MID-POINT DIAMETER [1][0][6] GM. WEIGHT ← note 106 gms

Kernel Rows:

[2] 1 = INDISTINCT 2 = DISTINCT [1][6] NUMBER

[2] 1 = STRAIGHT 2 = SLIGHTLY CURVED 3 = SPIRAL

Silk Color (Exposed at Silking Stage):

[1] 1 = GREEN 2 = PINK 3 = SALMON 4 = RED

Husk Color:

[2] FRESH } 1 = LIGHT GREEN 2 = DARK GREEN 3 = PINK

[6] DRY } 4 = RED 5 = PURPLE 6 = BUFF

Husk Extention: (Harvest Stage)

[3] 1 = SHORT (Ears Exposed) 2 = MEDIUM (Barely Covering Ear)
3 = LONG (8–10CM Beyond Ear Tip)
4 = VERY LONG (> 10 CM)

Husk Leaf:

[2] 1 = SHORT (< 8 CM) 2 = MEDIUM (8–15 CM) 3 = LONG (> 15 CM)

Shank:

[1][3] CM LONG [6] NO. OF INTERNODES

Position at Dry Husk Stage:

[1] 1 = UPRIGHT 2 = HORIZONTAL 3 = PENDENT

Taper:

[2] 1 = SLIGHT 2 = AVERAGE 3 = EXTREME

Drying Time (Unhusked Ear):

[1] 1 = SLOW 2 = AVERAGE 3 = FAST

8. KERNEL (Dried):

Size (From Ear Mid-Point):

[0][9] MM LONG [0][6] MM. WIDE [0][4] MM. THICK 00006

Shape Grade (% Rounds)

[1] 1 = < 20 2 = 20–40 3 = 40–60 4 = 60–80 5 = > 80

8. KERNEL (Dried) :

[1] **Pericarp Color:** 1 = COLORLESS 2 = RED-WHITE 3 = TAN 4 = BRONZE 5 = BROWN 6 = LIGHT RED 7 = CHERRY RED 8 = VARIEGATED (Describe) _____

[1] **Aleurone Color:** 1 = HOMOZYGOUS 2 = SEGREGATING (Describe) _____

[10] 1 = WHITE 2 = PINK 3 = TAN 4 = BROWN 5 = BRONZE 6 = RED 7 = PURPLE 8 = PALE PURPLE 9 = VARIEGATED (Describe) (10) yellow

[3] **Endosperm Color:** 1 = WHITE 2 = PALE YELLOW 3 = YELLOW 4 = PINK-ORANGE 5 = WHITE CAP.

Endosperm Type:

[2] 1 = SWEET (su1) 2 = EXTRA SWEET (sh2) 3 = NORMAL STARCH 4 = HIGH AMYLOSE STARCH 5 = WAXY STARCH 6 = HIGH PROTEIN 7 = HIGH LYSINE 8 = OTHER (Specify) _____

[0][9] GM. WEIGHT /100 SEEDS (Unsized Sample)

9. COB:

[2][3] MM. DIAMETER AT MID-POINT

Strength:

[1] 1 = WEAK 2 = STRONG

Color:

[1] 1 = WHITE 2 = PINK 3 = RED 4 = BROWN 5 = VARIEGATED 6 OTHER (Specify) _____

10. DISEASE RESISTANCE (O = Not Tested, 1 = Susceptible, 2 = Resistant):

[0]	STALK ROT (Diplodia)	[0]	STALK ROT (Fusarium)	[0]	STALK ROT (Gibberella)
[1]	NORTHERN LEAF BLIGHT	[0]	SOUTHERN LEAF BLIGHT	[0]	SMUT
[0]	SOUTHERN RUST	[0]	CORN SMUT	[0]	BACTERIAL WILT
[1]	BACTERIAL LEAF BLIGHT	[0]	MAIZE DWARF MOSAIC	[0]	STUNT
[0]	OTHER (Specify)				

11. INSECT RESISTANCT (O = Not Tested, 1 = Susceptible, 2 = Resistant):

[0]	CORNBORER	[1]	EARWORM	[0]	SAPBEETLE	[0]	APHID
[0]	ROOTWORM (Northern)	[0]	ROOTWORM (Western)				
[0]	ROOTWORM (Southern)	[0]	OTHER (Specify) _____				

12. VARIETIES MOST CLOSELY RESEMBLING THAT SUBMITTED FOR THE CHARACTERS GIVEN:

CHARACTER	VARIETY	CHARACTER	VARIETY
Maturity	2132 su_1	Kernel Type	2132 su_1
Plant Type	2132 su_1	Quality (Edible)	Ill. 453 sh_2
Ear Type	2132 su_1	Usage	mate for Florida-Sweet

REFERENCES:

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Corn: Culture, Processing, Products. 1970 Avi Publishing Company, Westport, Connecticut. (Numerous (Authors)

Emerson, R.A., G.W. Beadle, and A.C. Fraser. A Summary of Linkage Studies in Maize. Cornell A.E.S., Mem. 180. 1935.

The Mutants of Maize. 1968. Crop Science Society of America. Madison, Wisconsin.

Stringfield, G.H. Maize Inbred Lines of Ohio. Ohio A.E.S. Bul. 831. 1959.

Butler, D.R. 1954 — A System for the Classification of Corn Inbred Lines -- PhD. Thesis, Ohio State University.

COMMENTS:

Heat units not determined.

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